

## ABSTRACT

An air conditioning system for an aircraft in which cabin air is recirculated and mixed with cold air from an air conditioning machine which includes at least one expansion turbine over which warm pressurised air is expanded and cooled, and wherein the system includes a heat exchanger in which a heat load from hot cabin air is exchanged with the warm pressurised air prior to the pressurised air being expanded by the expansion turbine, further including a condenser heat exchanger in which recirculating cabin air is used to cool and promote water removal from the warm pressurised air before it is expanded by the expansion turbine.